Amendments to Application no. 10/707,919

Amendments to Specification

1. Replace paragraph [0002] with one replacement paragraph:

[0002] This invention is about an air sterilizing system, which uses intense 253.7nm wavelength ultraviolet (UV) irradiation to free air from live bacteria, viruses and other microorganisms. The method can also be applied to sterilize any fluent material, including gas, water or other fluids, containing every kind of live microorganisms naturally with or from biological agents used by terrorists or in warfare.

2. Replace paragraph [0012] with one replacement paragraph:

[0012] This invention is about an air sterilizing method and apparatus to destroy all live microorganisms in the air in large volumes (300 cfm to 30,000 cfm) to satisfy the increasing needs for the purposes of anti infectious disease and anti terrorism. These apparatus can sterilize either fresh air or return air before distribution. Or they can be used to sterilize contaminated air before exhausting it to the environment. An apparatus can be designed for a killing rate higher than 99.999% by adjusting the number of UV lamps and extending the length of the circuitous sterilizing chamber(s). The employment of circuitous chamber(s) is for the purpose of increasing exposure to UV radiation that is used to kill all live microorganisms that pass through the inlet filter.

3. Replace paragraph [0042] with one replacement paragraph:

[0042] Referring to Fig.1, the basic construction of an apparatus for sterilizing air in large volume (300 cfm to 30,000 cfm) by radiation of 253.7nm wavelength ultraviolet rays in accordance with this invention is shown, including an exterior housing 8 with an air inlet 1, an blower or fan and associated motor 2, an inlet filter unit 3, a roundabout UV germicidal sterilizing chamber 10 with UV visual inspection windows 5 and UV sensors 6 on it, an air outlet 11 with an inspection window 12 and an outlet filter 13.

4. Replace paragraph [0044] with one replacement paragraph:

[0044] As better shown in Fig. 2, within the inlet 1, there is preferably a blower or fan and associated motor 2 to give air enough power to go though the apparatus. Connected to the inlet 1, there is an inlet filter unit 3 so that all air drawn through the inlet 1 must pass through the inlet filter 3 before entering the chamber 10. The basic function of the inlet filter unit 3 is intercepting and retaining any fairly large particles (1um to 10 um) to increase UV killing power and to protect UV lamp tubes 15 in said chamber 10 where air flows from the inlet filter unit 3 to the outlet filter unit 13.